### Flood Diversion Authority November Board Meeting

**Project Delivery - Monthly Summary** 

**Presented by** 

Program Management Consultant November 8, 2012

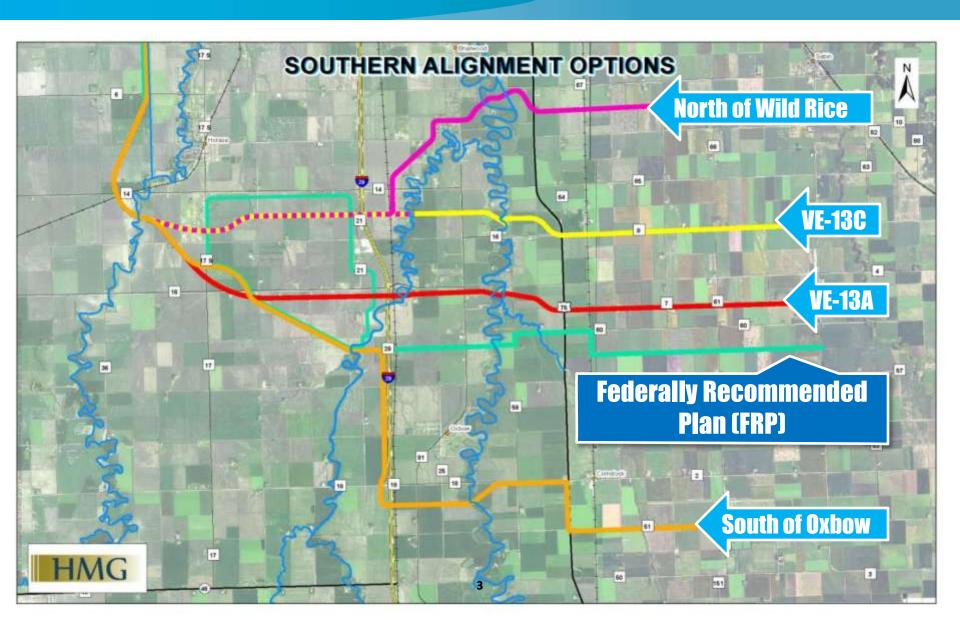


Post-feasibility analyses evaluated the following Southern alignment options:

- 1. Value Engineering #13 Option A (VE-13A)
- 2. Value Engineering #13 Option C (VE-13C)
- 3. North of the Wild Rice/Red River confluence
- 4. South of Oxbow



### **Southern Alignment Options**



The advantages of the VE-13A option over VE-13C include:

- 1. Fewer residential structures impacted (with or without levees for the Oxbow and Comstock areas)
- 2. Fewer newly impacted residential structures
- 3. Fewer businesses impacted
- 4. Greater estimated cost savings

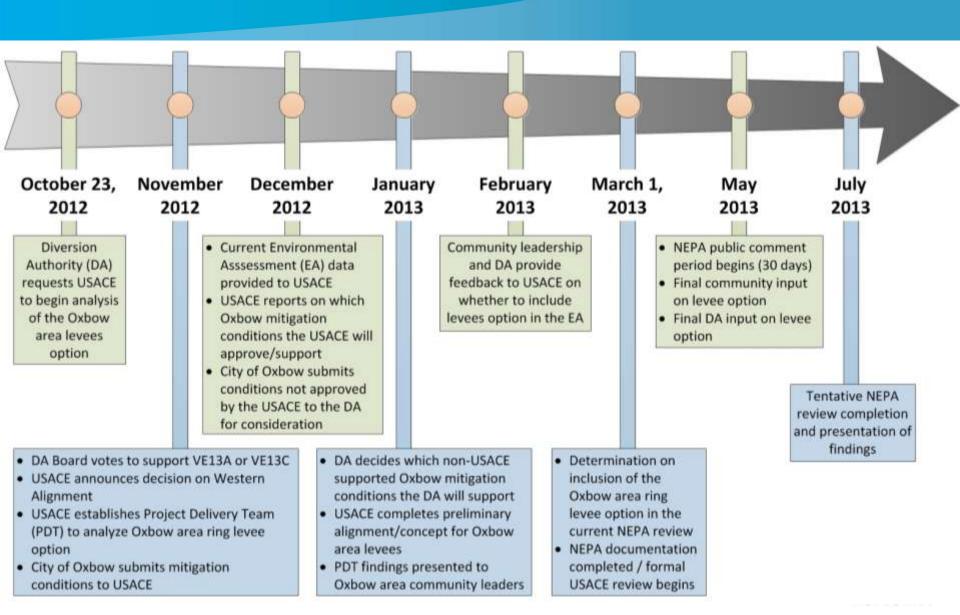


- ▲ The two Diversion Authority's technical teams recommend VE-13A option:
  - Technical Advisory Staff (TAC)
  - Local Sponsor Local Consultant Technical Team (LSLCTT)





### Oxbow Area Levee Analysis and NEPA Timeline



### **HMG Task Order Amendments**

- - Period of performance extended to June 30, 2013
- - Adds additional QA/QC review, bundled modeling and mapping, and Summary Technical Memorandum
  - period of performance extended to December 31, 2012
- Task Order 6
  - Adds update of draft real estate cost estimate



#### **HMG Task Order Amendments and New Task Order**

- - Reach 1 Low Flow Channel (LFC) RVR modeling
- Task Order 9
  - Tributary peak modeling
  - Assistance for the Maple River Aqueduct Physical Model
  - Support Corps modeling of the Probable Maximum Flood



# New HMG Task Order 13 – Levee Design and Design Support

Red River Levees

Preliminary Engineering for In Town Levees

Upstream Staging Area Levees/Ring Dikes

Design Support



## **HMG Task Order Amendments and New Task**

| Houston-Moore Group Task Order Summary  | Increased Amount (\$) |
|---|-----------------------|
| Task Order No. 2 - Amendment 1 Design of Work Package 2 (CR-31 Bridge)            | 0                     |
| Task Order No. 3 - Amendment 1 Design of Work Package 4 (Reach 3)                 | 0                     |
| Task Order No. 4 - Amendment 1 Design of Work Package 7 (CR-32 and CR-22 Bridges) | 0                     |
| Task Order No. 5 – Amendment 2 Post Feasibility Engineering Analysis              | 40,000                |
| Task Order No. 6 – Amendment 2 Land Management Services                           | 90,000                |
| Task Order No. 8 – Amendment 2 Work-In-Kind                                       | 0                     |
| Task Order No. 9 – Amendment 2 Hydrology and Hydraulic Modeling                   | 95,000                |
| Task Order No. 13 - Levee Design and Design Support                               | 475,000               |
| Total   | 650,000               |

### Minnesota Department of Natural Resources Amendment

| Minnesota Department of Natural Resources       |       | Increased<br>Amount (\$) |
|---|-------|--------------------------|
| Amendment 1 - Complete Scoping Phase of the EIS |       | 115,550                  |
|   | Total | 115,550                  |

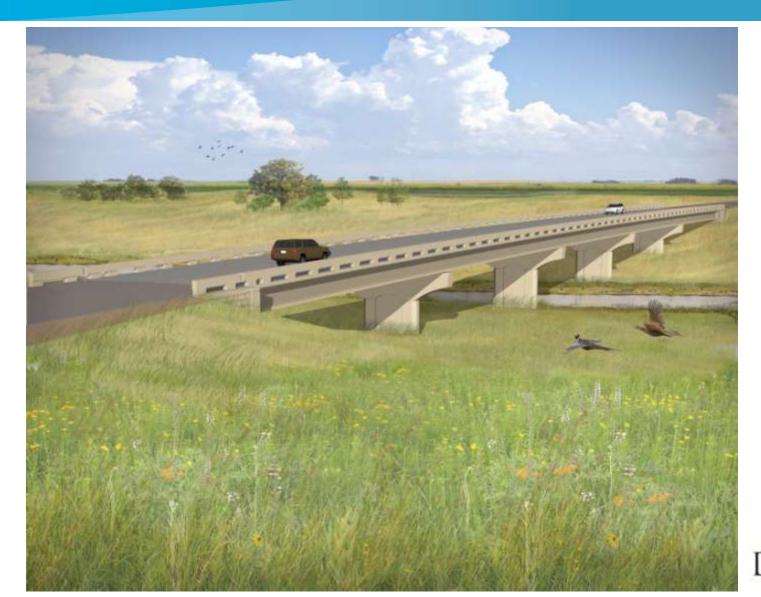
Period of performance is extended to February 1, 2014



- Task Order 1 Design Project Management
  - Develop supporting data and participate in meetings
  - Project Management, Project Controls, QA/QC
- - 90% design submittal scheduled for end of November
- - 90% design submittal scheduled for December
- ◆ Task Order 4 Work Package 7 (CR-32 and CR-22)
  - 90% design submittal scheduled for end of November



# **Typical County Bridge**

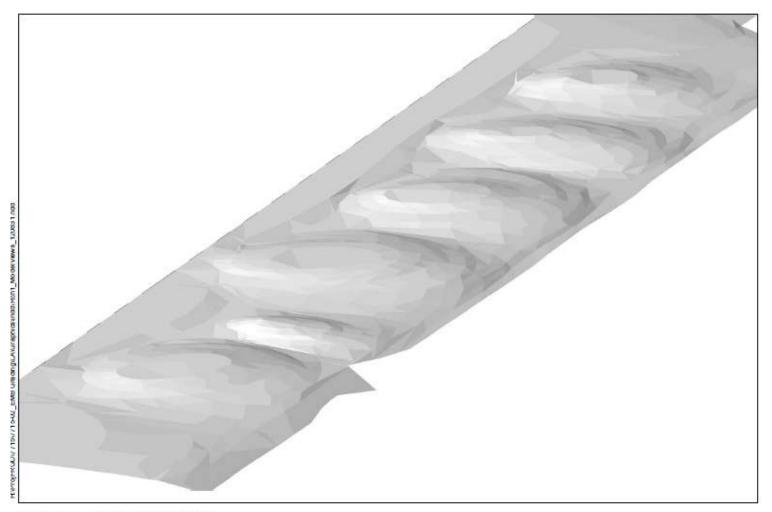




- ▲ Task Order 5 Post Feasibility Engineering Analysis
  - VE-13 and Associated Studies completed
  - Summary Technical Memorandum in December
- ▲ Task Order 6 Land Management Services
  - Hardship Acquisitions, on-going ROEs
- Task Order 7 Recreation and Use Master Plan
  - Undulating EMB grading design for Reach 1 and Bridge Work Packages - initial drafts completed



## **EMB Undulating Berm**





- Task Order 8 Work-In-Kind (WIK)
  - Reach 1 LFC meander modeling completed
  - Evaluations Completed: EMB openings, local drainage, gated inlet, maximum project design flows
- Task Order 9 Hydrology and Hydraulic Modeling
  - Inlet modeling updates, extended geometry of Rush/Lwr Rush
  - Support for Maple River Aqueduct physical modeling
- ▲ Task Order 10 Utilities Design and Identification
  - Maple River to Outlet relocation plan completed



- Task Order 11 Work Package 11 (CR-20 and Reach 6)
  - Just starting Preliminary Design work
- ◆ Task Order 12 Work Package 13 (CR-10 and Channel)
  - Just starting Preliminary Design work

